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(54) METHOD AND DEVICE FOR ACCOUNTING CONTROL OF OFF-LINE DATA

(57)Abstract:

PROBLEM TO BE SOLVED: To change an accounting or reproducing control method after selling data in an off-line data use system where the time of data acquisition and that of data use are different.

SOLUTION: In an off-line data reception and delivery system consisting of a selling terminal 20, a center device 30, and a user terminal 40; accounting control data where an accounting method at the time of setting is recorded in the selling terminal 20 is stored in the center device 30 and is added to sold data, and another accounting control data is reported to the user terminal 40 from the center device 30 at the time of reproducing data in the user terminal 40. Accounting control data in the center

device can be changed by the selling terminal 20 or the user terminal 40.

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CLAIMS

[Claim(s)]

[Claim 1]An off-line distribution system of data which acquires and uses data from the exterior of a user terminal in a user terminal characterized by comprising the following.
A use limiting method alteration means whose change is enabled after this user terminal acquires this data for how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data set up to this data, before this user terminal acquires this data.

A reproduction decision means which judges whether it is the no allowed use of this data based on how to restrict use set up to this data when using this data in a user terminal.

[Claim 2]An off-line distribution system of data which consists of a connectable center apparatus and a user terminal mutually by a communication line characterized by comprising the following.

A means to distribute fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of said data and this data to a user terminal from a center apparatus.

A fee collection control data update means used as the new fee collection control data which a user terminal acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means.

A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this

data in a user terminal.

[Claim 3]An off-line distribution system of data which consists of a connectable user terminal and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which adds fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data to said data, in said sales terminal.

A fee collection control data update means used as the new fee collection control data which a user terminal acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means. A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 4]An off-line distribution system of data which consists of a connectable user terminal, a center apparatus, and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which adds fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data to said data, in a sales terminal.

A reproduction limiting method alteration means which changes how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data currently recorded on a center apparatus in a user terminal.

A fee collection control data update means used as the new fee collection control data which a user terminal acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means. A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 5]An off-line distribution system of data which consists of a connectable user terminal, a center apparatus, and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which adds fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data

to said data, in a sales terminal.

A reproduction limiting method alteration means which changes how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data currently recorded on a center apparatus in a center apparatus or a sales terminal.

A fee collection control data update means used as the new fee collection control data which a user terminal acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means. A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 6]A fee collection control method of off-line data forming a means to change a method (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) of restricting this use, for every user in claims 1, 2, 3, 4, and 5.

[Claim 7]A fee collection control method of off-line data forming a means to change a unit per selling price of a method (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) which restricts this use for every user in claims 1, 2, 3, 4, and 5.

[Claim 8]A fee collection control method of off-line data forming a means to change the number of times of a method (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) which restricts this use, or the selling price per time for every user in claims 1, 2, 3, 4, and 5.

[Claim 9]Two or more data is stored in the same storage in claims 1, 2, 3, 4, and 5, A fee collection control method of off-line data forming a means it shall be [a means] different for every data in a method (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) of restricting use of this data.

[Claim 10]A fee collection control method of off-line data having stored two or more data in the same storage, and describing how (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) to restrict this data use, about this each data in claims 1, 2, 3, 4, and 5.

[Claim 11]A fee collection control method of off-line data which made one selectable in claims 1, 2, 3, 4, and 5 out of two or more methods of restricting use of this data.

[Claim 12]An off-line distribution system of data which acquires and uses data from the exterior of a user terminal in a user terminal characterized by comprising the following.

A use limiting method alteration means whose change is enabled after this user

terminal acquires this data for how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data set up to this data, before this user terminal acquires this data.

A reproduction decision means which judges whether it is the no allowed use of this data based on how to restrict use set up to this data when using this data in a user terminal.

[Claim 13]An off-line distribution system of data which consists of a connectable center apparatus and a user terminal mutually by a communication line characterized by comprising the following.

A means to distribute fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of said data and this data to a user terminal from a center apparatus.

A fee collection control data update means used as the new fee collection control data which a user terminal acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means. A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 14]An off-line distribution system of data which consists of a connectable user terminal and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which adds fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data to said data, in said sales terminal.

A fee collection control data update means used as the new fee collection control data which a user terminal acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means. A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 15]An off-line distribution system of data which consists of a connectable user terminal, a center apparatus, and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which adds fee collection control data which described how (a

refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data to said data, in a sales terminal.

A reproduction limiting method alteration means which changes how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data currently recorded on a center apparatus in a user terminal.

A fee collection control data update means used as the new fee collection control data which a user terminal acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means. A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 16]An off-line distribution system of data which consists of a connectable user terminal, a center apparatus, and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which adds fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data to said data, in a sales terminal.

A reproduction limiting method alteration means which changes how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data currently recorded on a center apparatus in a center apparatus or a sales terminal.

A fee collection control data update means used as the new fee collection control data which a user terminal acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means. A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 17]A fee collection control device of off-line data forming a means to change a method (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) of restricting this use, for every user in claims 12, 13, 14, and 15.

[Claim 18]A fee collection control device of off-line data forming a means to change a unit per selling price of a method (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) which restricts this use for every user in claims 12, 13, 14, and 15.

[Claim 19]A fee collection control device of off-line data forming a means to change the number of times of a method (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) which restricts this use, or the selling price per time for every user in claims 12, 13, 14, and 15.

[Claim 20]Two or more data is stored in the same storage in claims 12, 13, 14, and 15, A fee collection control device of off-line data forming a means it shall be [a means] different for every data in a method (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) of restricting use of this data.

[Claim 21]A fee collection control device of off-line data having stored two or more data in the same storage, and describing how (during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase or refreshable portion) to restrict this data use, about this each data in claims 12, 13, 14, and 15.

[Claim 22]A fee collection control device of off-line data which made one selectable in claims 12, 13, 14, and 15 out of two or more methods of restricting use of this data.

[Claim 23]An off-line distribution system of data which consists of a connectable user terminal and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which memorizes fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of said data, in said sales terminal to a memory medium.

A reproduction decision means which judges whether it is the no for which this fee collection control data in a memory medium is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 24]An off-line distribution system of data which consists of a connectable user terminal and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which adds how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of this data to said data, in said sales terminal.

A fee collection control data update means which a user terminal uses as the new fee collection control data which acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means with directions of fee collection control data added to this data.

A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

[Claim 25]An off-line distribution system of data which consists of a connectable user terminal and a sales terminal mutually by a communication line characterized by comprising the following.

A data selling tool which memorizes fee collection control data which described how (a refreshable portion is specified during accumulation reproduction frequency, accumulation reproduction time, and a regeneration phase) to restrict use of said data, in said sales terminal to a memory medium.

A fee collection control data update means which a user terminal uses as the new fee collection control data which acquires information about how to restrict reproduction about this data from a center apparatus, and is used by a reproduction decision means with directions of fee collection control data in this memory medium.

A reproduction decision means which judges whether it is the no for which this fee collection control data is used, and which is allowed use of this data when using this data in a user terminal.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention relates to the fee collection control method and device of off-line data.

[0002]

[Description of the Prior Art]In on-line use of the data which started in use of DB(s) (DataBase), such as literature documentation and corporate credit investigation. In recent years, a variety of data of the Internet, online karaoke, VOD (Video on Demand), etc. comes to be dealt with, and large scale-ization is following the data to hundreds of megabytes of picture image data from hundreds of bytes of text data. On the other hand, although improvement in the speed is also following the access speed of the communication line to several mega bps from hundreds of bps, it has not caught up with large scale-ization of data including picture image data. Mass picture image data as indicated to Japanese Patent Application No. No. 255389 [nine to] Then, CD, It records on mass media, such as optical discs including DVD, a user is beforehand sold or supplied widely, and the method of carrying out only control of the propriety of the use, the purchase of data, etc. to utilization time via communication is beginning to be used. As for the fee collection to the data in this case, it is common to be carried out based on the standard decided beforehand, i.e., the utilization time, using frequency, etc. And a single fee collection standard is used in the distribution service of such

data.

[0003]Such off-line use of data has not only when storing and distributing to media, such as an optical disc, but a gestalt which stores data into a terminal unit, such as distributing an image to the image server of a hotel using a teletext or a satellite, and is used later. It is not only the purpose that this sends large capacity data with little update frequency via a communication line with little transmission capacity, There are various purposes, such as use of a time zone with little traffic of communication lines, such as night, use of a small amount fee time zone, and off-line use of data suitable for the planned distribution and reception in consideration of traffic or telex rate gold of data.

[0004]

[Problem(s) to be Solved by the Invention]The purpose of this invention is to solve the following problems.

[0005](1) In the service which records the data body in which realization of various fee collection gestalten carries out difficult use on off-line media, such as an optical disc, and distributes it to a user beforehand, although it is off-line media, therefore, The fee collection in the utilization time point of the data according to the situation (a user's differentiation) of a utilization time term or a user and change of a charging method were difficult.

[0006]In recent years, sale of various products and service lets a violent marketing battle pass, and came to be provided with various gestalten. Differentiation of the customer especially according to rental spending and importance is remarkable at non-charge of the bank charge in a customer with much savings volume, offer of the free airline ticket in using frequency and an aeronautical-navigation customer with much distance, etc. The same tendency is expected also in sale of picture image data, such as a movie.

[0007]However, especially in off-line media, such as a VCR cassette tape, CD, and DVD, Conventionally, using frequency was used as a standard of the fee collection to data the data unit [, such as media units, such as CD, or a movie, and music,], available partial unit [of data] and its utilization-time, and utilization time term. However, those standards were difficult to be immobilization and to change a charging method (a standard or its unit prices, such as regeneration time and reproduction frequency) for every service, by change of a user's accumulation utilization time, accumulation using frequency, and a member class, a campaign period, etc.

[0008](2) Most, realization of a perfect outright-sales gestalt is instant delivery of the goods by cash settlement, and the effective method has it in making impossible specific the user who becomes a sale place at protection of a user's personal information accompanying difficult sale. In service of the parts of the goods for adults, etc., the way at the time of making a user impossible specific can obtain good sales performance. However, in off-line media which are indicated in literature

conventionally [above-mentioned] which sells the partial data in media, since a customer's management became indispensable, sale which made the user unspecified was difficult.

[0009]The purpose of this invention is to solve these problems.

[0010]

[Means for Solving the Problem]A sales terminal which sells media or data, sold media, or data, The following means are formed in an off-line data carrier distribution system which consists of a user terminal in which a user performs reproduction (use) of a center apparatus which memorizes a user of a sale place, and a gestalt of fee collection and sold media, or data.

[0011]The 1st fee collection control data that recorded a charging method in a point-of-sale of data which a center apparatus memorized and was sold in a sales terminal.

[0012]The 2nd fee collection control data that is added to media or data and specifies processing required for reproduction of media or data.

[0013]The 3rd fee collection control data that is notified to a user terminal from a center apparatus, and specifies processing required for reproduction of media or data.

[0014]A selling terminal which registers a data identifier which specifies sold media or data as only, user ID which specifies a user of a sale place as only, and the 1st fee collection control data to a center apparatus, and adds the 2nd fee collection control data to media or data.

[0015]A data identifier which specifies sold media or data as only, and user ID which specifies a user of a sale place as only, A center apparatus which memorizes a correspondence relation of the 2nd fee collection control data added to these media or data, and transmits the 3rd fee collection control data to a user terminal based on a demand from a user terminal.

[0016]A user terminal which acquires the 3rd fee collection control data from a center apparatus, and performs reproduction (acquisition) of data or media based on the 2nd and 3rd fee collection control data based on the 2nd fee collection control data added to data or media.

[0017]

[Embodiment of the Invention]The multimedia data sales system which is one example in the off-line data carrier distribution system of this invention is explained.

[0018](System configuration) The system configuration of a multimedia data sales system is explained using drawing 1. 10 is DVD which stored one or more multimedia data to sell. 20 is a sales terminal which inputs the information of the user who purchased the information on DVD10 sold when selling DVD10, and its DVD. 30 is a center apparatus which memorizes the information of DVD10 sold or its user and manages the sales terminal 20 and the user terminal 40. 40 is a terminal in which the user who purchased DVD10 reproduces the multimedia data stored in DVD10 (it reads

from DVD and uses). The file which stored multimedia data, the fee collection control data which controls the scramble-ized reproduction of these multimedia data, etc. are stored in DVD10. DVD10 can be specified as only by a disk serial number. Although 10 is DVD in this example, as long as it is a memory medium, it may be whatever, such as semiconductor memory, a magnetic disk, a magneto-optical disc, and an organism memory. The sales terminal 20, the center apparatus 30, and the user terminal 40 of each other are connected by the communication line 50. 60 is a user card and user ID and a password required for a user's attestation, and fee collection control data required for reproduction of the data in DVD10 are recorded. Although the center apparatus 30 was formed in drawing 1, when managing sale of DVD10 only by the sale side, the composition with which the center apparatus 30 and the sales terminal 20 were united is also possible.

[0019](Sales terminal) The outline of a sales terminal is explained using drawing 2.

[0020]The sales terminal 20 is equipped with the bar code reader 201, the touch-sensitive customer side display 202, the salesperson side display 203, the salesperson keyboard 204, IC card reader writers 205, the printer 206, and the DVD drive 207. Sales terminal 20 main part has the communication control part 210 which performs communication with I/O control unit 208 which controls these peripheral equipment 201-206, the treating part 209 which performs various processings in the sales terminal 20, the memory storage 211 which memorizes various data when processing, and the center apparatus 30.

[0021]The serial number of DVD which specifies DVD as only in the sales terminal 20, The user ID which specifies a buyer as only, and data ID which specifies the data sold among the data stored in this DVD at the time are inputted, it transmits to the center apparatus 30, the selling price of each data is received from the center apparatus 30, and it displays on the display 202. And the data purchased to a customer is made to choose, it transmits to the center apparatus 30 and the sales result is registered. The input of the serial number of DVD is performed by reading bar code printing recorded on the package of the main part of DVD, or this DVD by the bar code reader 201. It is also possible to form the DVD drive 207 in a sales terminal, and to read on DVD the serial number of optics or this DVD by which magnetic recording was carried out by reproduction of DVD.

[0022]A user is setting the user card 60 to IC card reader writers 205, and inputs into the sales terminal 20 the user ID currently recorded in this user card. A user chooses the data to purchase in the customer side display 202. The sales terminal 20 acquires the fee collection control data 500 explained at the back for reproducing the sold data in DVD with the user terminal 40 from the center apparatus 30, and records it on the user card 60 set to IC card reader writers 205. When the user is not carrying the user card 60 when purchasing data, the input of the user ID by the keyboard 204 and printing of the fee collection control data 500 based on the printer 206 are possible.

When purchasing data, the input of user ID is not indispensable and is dealt with as an unspecified user in that case.

[0023]When a DVD-RAM disk is used, it is possible to connect a DVD-RAM disk to the DVD drive 207 of the sales terminal 20, and to record the fee collection control code 500 on DVD directly. When making payment of the fee from the user to the sale side when purchasing, quick cash settlement of accounts or the credit card transaction to the user concerned based on user ID is used.

[0024](User terminal) The outline of a user terminal is explained using drawing 3.

[0025]The user terminal 40 has the DVD drive 407, IC card reader writers 402, the display 403, and the keyboard 404. User terminal 40 main part has the communication control part 410 which performs communication with I/O control unit 408 which controls these peripheral equipment 401-407, the treating part 409 which performs various processings in the user terminal 40, the memory storage 411 which memorizes the data in connection with various processings, and a center apparatus.

[0026]In the user terminal 40, when a user sets the user card 60 to IC card reader writers 402, the user ID in the user card 60, a password, and fee collection control data are inputted into the user terminal 40. And if a user enters a user password from the keyboard 404 and this password is in agreement with the password in the user card 60, it will become renewable [the data which the user in DVD10 similarly purchased according to the fee collection control data in the user card 60]. When the user is not carrying the user card 60 when reproducing data, the input of the user ID by the keyboard 404, a password, and fee collection control data is possible.

[0027]When a user newly purchases the data which is not purchased in DVD10 already possessed, according to this fee collection control data 500, reproduction of new data is attained with the user terminal 40 by requiring the new fee collection control data 500 of the center apparatus 30.

[0028]When making payment of the fee from the user to the sale side when purchasing, the credit card transaction from the user concerned based on user ID to the vender side using sales terminal ID, etc. are used.

[0029](Center apparatus) As for the center apparatus 30 explained using drawing 4 about the outline of a center apparatus, it has the display 303 and the administrator keyboard 304. Center apparatus 30 main part, The communication control part 310 which performs communication with I/O control unit 308 which controls these peripheral equipment 303 and 304, the treating part 309 which performs various processings in the center apparatus 30, the sales terminal 20, and the user terminal 40, various processings, each user terminal 40, the sales terminal 20, the data in connection with DVD10, There is DB311 which memorizes the information of a buyer and a vender.

[0030]The serial number of DVD in which the center apparatus 30 specifies DVD as only, The user ID which specifies a buyer as only, the data number which specifies the

data sold among the data stored in this DVD at the time, And it receives via the communication control part 308 from the sales terminal 20, and sales terminal ID etc. which specify the sales terminal 20 in which this data was sold are memorized to DB part 311. The selling price of data is calculated according to conditions, such as a user's purchase performance and a campaign period, and it provides to the sales terminal 20 or the user terminal 40.

[0031]what the center apparatus 30 generates new fee collection control data, and transmits to this user terminal 40 by the demand from the user terminal 40 -- the user terminal 40 -- this -- it becomes renewable [the new data corresponding to new fee collection control data].

[0032](Fee collection control data) Fee collection control data is explained using drawing 5.

[0033]Fee collection control data restricts reproduction of DVD according to a user's purchase style (restriction of specification of the purchased data, reproduction frequency, etc.).

[0034]In the fee collection control data 500. DVD. The disk serial number 510 and this DVD which are specified as only. Sales terminal ID530 which specifies the user ID 520 which specifies the user who purchased as only, and the sales terminal which sold this DVD as only, user terminal ID521 which specify a user terminal as only, and the data number 541 and its file name of the data which the user purchased, The comment 543 explaining the contents of data and the reproduction limiting methods (accumulation reproduction frequency accumulation reproduction time, refreshable time, refreshable period) 544-547 corresponding to this each data are described. When restricting reproduction by accumulation reproduction frequency, the accumulation reproduction frequency limit value 544, When carrying out by accumulation reproduction time, the accumulation-reproduction-time limit value 545 carries out in refreshable time and the refreshable time limit value 546 carries out in a refreshable period, 547b is described for 547a and the end date time of refreshable at the time of refreshable inaugural year days and months. The data of 541-548 is described for each [which is stored in DVD10] data of every. The fee collection control data 500 is memorized for every DVD10.

[0035]With the fee collection control data 500, when the center control 548 is specified as DVD concerned or data, connection with the center apparatus 30 becomes indispensable when reproducing the data in the user terminal 40.

[0036]It is enciphered in the form which can be canceled by a specific key code, and this fee collection control data 500 is recorded on DVD10 or the user card 60. As this fee collection control data 500 was shown in drawing 5, except when a record format describes, describing in script form like a programming language is also considered.

[0037]A file name may be used although the data number is used for discernment of the data in DVD in this example.

[0038](User card) The user card 60 is explained using drawing 6.

[0039]Record reproduction media, such as an IC card and a magnetic card, are used for the user card 60. On the user card 60, the password 612 for performing attestation of the user ID 611 and this user who specify a user as only, the term of validity 613 of this user card, the disk serial number 620, and the fee collection control data 640 are memorized. The disk serial number 620 is for identifying of which DVD10 the fee collection control data 640 is recorded on the user card 60, and can memorize the information 620 and 640 about one or more DVDs on the one user card 60. It is equivalent to the fee collection control data 500 explained by drawing 5 about the contents of the fee collection control data 640.

[0040](User management file) The user management file 700 is explained using drawing 7.

[0041]The user management file 700 is stored in DB311 of the center apparatus 30, and records the correspondence relation between user ID and a password, and the purchase style for every DVD according to each user. The contents and the structures 711–747 of the user management file 700 serve as the form where the data structure in the user card 600 shown in drawing 6 was stored in every two or more, i.e., user, 710. However, the user class 714 which shows the class which differentiated a user, such as changing the selling price of data according to a user, is stored.

[0042](Data sales file) The data sales file 750 is explained using drawing 8.

[0043]The data sales file 750 is stored in DB311 of the center apparatus 30, and memorizes the price of each data currently recorded in DVD10. the data sales file 750 -- the unit prices 784–787 of the disk serial number 760, the data number 771, the file name 782, and each playback limiting method (accumulation reproduction frequency accumulation reproduction time, refreshable time, refreshable period) -- an user class (A, B, C, D) -- it is recorded independently.

[0044]A data sales file may be stored also in the memory storage 211 of the sales terminal 20 so that the sales terminal 20 can sell data the center apparatus 30 and off-line.

[0045](Purchase data selection picture) A purchase data selection picture is explained using drawing 9.

[0046]The purchase data selection picture 800 is a screen for a user to choose the data in DVD to purchase in the sales terminal 20. A total of 840 of the data number 810, the data name 820, the purchase style 830 of each data, and the amount of money for a purchase schedule is displayed on the purchase selection picture 800 about each data in DVD10 which a user is going to purchase. The unit price 831, the purchase unit 832 which a user inputs, and the purchased amount 833 of the data are displayed about each reproduction limiting method (accumulation reproduction frequency accumulation reproduction time, refreshable time, refreshable period) which can purchase the purchase style 830 of each data. The file name of this data is used

for a data name.

[0047](Contract modification screen) The contract modification screen 900 is explained using drawing 10.

[0048]In the user terminal 40, when purchasing newly the non-purchase data in DVD10 which the user owns or changing the purchase style of purchased data that is, the contract modification screen 900 is used, when changing the contract form about the DVD. A total of 940 of the data number 910, the data name 920, the purchase style 930 of each data, and the amount of money for a purchase schedule is displayed on the contract modification screen 900 about each data in DVD10 which a user is going to purchase. The unit price 931, the purchased unit 932, and the purchased amount 933 of the data are displayed about each reproduction limiting method (accumulation reproduction frequency accumulation reproduction time, refreshable time, refreshable period) which can purchase the purchase style 930 of each data. A contract is changed inputting a new purchase unit into the purchased unit 932, or by inputting into the purchase unit 932 of another reproduction limiting method. And the difference of the purchased amount before change and the purchased amount after change is displayed on a total of 940 of the amount of money for a purchase schedule. When a purchase unit is reduced, a user is able for the total amount to be subtracted and to receive refundment.

[0049]This contract modification screen 900 is used also as an accounting information data changing screen in the sales terminal 20.

[0050](Selling price change screen) The selling price change screens 4001 and 4002 are explained using drawing 11 and drawing 12.

[0051]In the sales terminal 20, the selling price change screens 4001 and 4002 are used in order to change the selling price of the data in specific DVD10. First, a salesperson inputs the user ID 4011 as his salesperson, the password 4012, and the disk serial number 4013 of DVD10 which changes the selling price using the selling price change screen 1 (4001). Next, the selling price of each data is changed using the selling price change screen 2 (4002). The data number 4010, the data name 4020, the purchase style 4030 of each data, and the disk serial number 4050 are displayed on the selling price change screen 2 (4002) about each data in DVD10 which is going to change the selling price. About the disk, about each playback limiting method (accumulation reproduction frequency accumulation reproduction time, refreshable time, refreshable period) which can be sold, the purchase style 4030 of each data displays the unit price 4031 before the change, and inputs the unit price 4032 after change. By specific operation, it can add and the reproduction limiting method which can sell each data can be deleted.

[0052](User-class change screen) The user-class change screens 4101 and 4102 are explained using drawing 13 and drawing 14.

[0053]In the sales terminal 20, the user-class change screens 4101 and 4102 are used

in order to change a specific user's user class. First, a salesperson inputs the user ID of the user who changes the user ID 4111 as his salesperson, the password 4112, and an user class using the user-class change screen 1 (4101). Next, the user class of the user concerned is changed using the user-class change screen 2 (4102). The user ID 4114 of the user who is going to change an user class, and the present user class 4115 of the user concerned are displayed on the user-class change screen 2 (4102), and the user class 4116 after change is inputted into it.

[0054](Regenerative data selection picture) The regenerative data selection picture 5000 is explained using drawing 15.

[0055]The regenerative data selection picture 5000 is used in order to choose the data which a user is going to reproduce in the user terminal 40. The data number 5010, the data name 5020, and the purchase style 5030 of each data are displayed. The available unit 5032 which remains is displayed on the purchase style 5030 of each data at the time among the purchased reproduction limiting method (accumulation reproduction frequency accumulation reproduction time, refreshable time, refreshable period) 5031 and the unit purchased [the]. The file name of this data is used for a data name, and the input 5033 of a data number performs selection of data.

[0056]Next, each processing in this example using the system configuration, the data structure, and screen specifications which were expressed above is explained.

[0057](Processing of a sales terminal)

(1) Explain the sales processing of a sales processing sales terminal using drawing 16.

[0058]Processing accompanying sale of DVD10 in the sales terminal 20 is performed in the following procedures.

[0059]The sales processing 1000 will display the request message which sets the user card 60 to a buyer to the card reader 205 on the customer side display device 202, if a sales processing start key is inputted (1002). The user ID 611, the password 612, and the term of validity 613 which are stored in the user card 60 are read (1003). Next, the message which requires the input of a password of a buyer is displayed on the customer side display device 202 (1004), and the input of a password is received (1005). And coincidence with the password 612 read from the user card 60 is inspected (1006).

[0060]When the user card 60 is not shown from a customer, the message which requires the input of user ID of a buyer is displayed on the customer side display device 202 (1030), and the input of user ID is received (1031). Next, the message which requires the input of a password of a buyer is displayed on the customer side display device 202 (1041), and the input of a password is received (1042). And in [transmit this user ID and the password which were entered into the center apparatus 30 (1032), and] the center apparatus 30, Coincidence of correspondence-related [of the user ID 711 and the password 712 which are registered into the user management file 700 of the center apparatus 30] is inspected,

and the result is transmitted to the sales terminal 20 from the center apparatus 30 (1033).

[0061]And if correspondence of user ID and a password is inharmonious, a password will display an inharmonious message on the customer side display device 202 (1007). When it does not have user ID, it is dealt with as an unspecified user by inputting "9999" as user ID. The handling as an unspecified user can make impossible pursuit of the fact of this user that purchased this data, and can protect this user's personal information.

[0062]If a password is in agreement, the sales processing 1000 will display the message which requires the set to the DVD drive 207 of DVD10 on the salesperson side display device 203 (1020a), and will read the disk serial number of DVD (1021a). The serial number of DVD10 is inputted by the input which used (1034), the bar code reader 201, and the keyboard 204 when there was no DVD drive 207 in the sales terminal 20 (1021b).

[0063]And the serial number of sales terminal ID which specifies a sales terminal as the center apparatus 30, the user ID which the buyer inputted, and DVD set to the DVD drive 207 is transmitted (1008), and the sales amount according to purchase style of each data is received from the center apparatus 30 (1009). And the purchase data selection picture 800 which requires the input of the number of data, and the purchase style of each data which was shown in the customer side display device 202 at drawing 9, and to purchase, It displays as a table of the sales amount of the name 820 of each data stored in DVD10, and the sales amount 831 of each purchase style (1010), and the input of the data number 810 and the purchase style 830 is received (1011). The input of a data number and a purchase style is displayed as a total of 840 of the selling price of the data which the amount of money for a purchase schedule chose while it is carried out until an end is directed, and an input is performed. The sales amount is asked to the center apparatus 30 because the sales amount may change with a user's purchase performance, a vender's sales performance, a selling area, sales promotion periods, etc.

[0064]When not asking the center apparatus 30 the sales amount (off-line processing), (1035), The sales amount of each data is searched from the data sales file 750 memorized by the memory storage 211 in the sales terminal 40 (1013), and it displays as a table of the name of each data, and the sales amount of each purchase style (1010).

[0065]Next, the data number of the data which the customer purchased, and a purchase style are transmitted to the center apparatus 30 (1015). And it is generated according to the purchase style of each data sold from the center apparatus 30, the enciphered fee collection control data 500 is received (1016), and it records on DVD10 (1018). When unrecordable on DVD10, it is enciphered and the fee collection control data 500 is recorded on a user card (1020). When unrecordable on a user card,

or when the user does not have a user card, the fee collection control data 500 enciphered using the printer 206 of a sales terminal is printed (1022).

[0066](2) Explain the selling price change processing in the selling price change processing sales terminal 20 using drawing 17.

[0067]If a selling price change processing start key is inputted, the selling price change processing 1100, To the salesperson side display device 203, a vender's user ID, a password, And the selling price change screen 1 (4001) shown in drawing 11 which requires the input of the disk serial number of DVD is displayed (1101), and the disk serial number of DVD10 is inputted by the input using the bar code reader 201 or the keyboard 204 (1102).

[0068]And the serial number of sales terminal ID, user ID, a password, and DVD is transmitted to the center apparatus 30 (1103). In the center apparatus 30, a salesperson's user ID 711 and the coincidence of correspondence-related [of the password 712] which are registered into the user management file 700 of the center apparatus 30 are inspected, and the result is transmitted to the sales terminal 20 from the center apparatus 30. The selling price change processing 1100 receives the coincidence inspection result of the password (1104), and if the correspondence relation between user ID and a password is inharmonious, it will display a message with an inharmonious password on the salesperson side display device 202 (1105). If a password is in agreement, the sales amount according to purchase style of each data before change will be received from the center apparatus 30 (1106). And the selling price change screen 2 (4002) shown in drawing 12 which requires the input of selling price ***** of the salesperson side display device 203, the name 4020 of each data stored in DVD10, and each purchase style 4030 -- it displays as a table of the sales amount 4031 before another change (1107), and the input of the sales amount 4032 after change is received (1108). An input is performed until an end is directed. Next, the sales amount according to purchase style of each data after change is transmitted to the center apparatus 30 (1109). In the center apparatus 30, the contents of the data sales file 750 are updated to the sales amount according to purchase style of each received data (3406).

[0069](3) Explain the user-class change processing in the user-class change processing sales terminal 20 using drawing 18.

[0070]If an user-class change processing start key is inputted, the user-class change processing 1200, The user-class change screen 1 (4101) shown in drawing 13 which requires the input of the user ID of the user who changes a vender's user ID, a password, and an user class into the salesperson side display device 203 is displayed (1201), and the input of them 4111-4113 is performed (1202). And the user ID of sales terminal ID, user ID, a password, and a change target is transmitted to the center apparatus 30 (1203). In the center apparatus 30, a salesperson's user ID 711 and the coincidence of correspondence-related [of the password 712] which are registered

into the user management file 700 of the center apparatus 30 are inspected, and the result is transmitted to the sales terminal 20 from the center apparatus 30. The user-class change processing 1200 receives the coincidence inspection result of the user ID and password (1204), and if the correspondence relation between user ID and a password is inharmonious, it will display a message with an inharmonious password on the salesperson side display 203 (1205). If a password is in agreement, the user class of the user concerned before change will be received from the center apparatus 30 (1206). The user-class change screen 2 (4102) shown in drawing 14 which requires the input of the change of an user class to the salesperson side display device 203 is displayed (1207), and the input of the new user class 4116 is received (1208). Next, the user ID of each user after change and a new user class are transmitted to the center apparatus 30 (1209). In the center apparatus 30, the user class 714 of the user ID 711 which received is updated in the user management file 700.

[0071](4) Explain the accounting information data changing in the accounting information data changing processing sales terminal 20 using drawing 19.

[0072]In the fee collection control data 500, when the center control 548 is specified, connection with the center apparatus 30 becomes indispensable when reproducing the data in the user terminal 40. It is specified when a vender and the donor of data want to change if needed, the conditions 500 required for reproduction, i.e., the fee collection control data, of the data. The directions which change the fee collection control data 500 registered into DB311 of the center apparatus 30 are performed in the sales terminal 20.

[0073]If an accounting information data changing processing start key is inputted, the accounting information data changing processing 1300 will display the message which requires a vender's user ID and the input of a password on the salesperson side display device 203 (1301), and will perform those inputs (1302). And sales terminal ID, user ID, and a password are transmitted to the center apparatus 30 (1303). In the center apparatus 30, a salesperson's user ID 711 and the coincidence of correspondence-related [of the password 712] which are registered into the user management file 700 of DB311 of the center apparatus 30 are inspected, and the result is transmitted to the sales terminal 20 from the center apparatus 30. The fee collection control data change processing 1300 receives the coincidence inspection result of user ID and a password (1304), and if the correspondence relation between user ID and a password is inharmonious, it will display a message with an inharmonious password on the salesperson side display 203 (1305). If a password is in agreement, the fee collection control data of the user concerned before change will be received from the center apparatus 30 (1306). The contract modification screen 900 shown in drawing 10 which requires the input of change of a reproduction limiting method (lapsed time after accumulation reproduction frequency accumulation reproduction time, refreshable time, a refreshable period, and sale) to the salesperson side display

device 203 is displayed (1307), and the input of a new reproduction limiting method is received (1308). An input is performed until an end is directed. Next, the reproduction limiting method after change is transmitted to the center apparatus 30 (1309). In the center apparatus 30, the fee collection control data 500 based on a new reproduction limiting method is generated about the user ID which received, and the fee collection control data data 740 of the user management file 700 of the user concerned is updated.

[0074](Processing of a user terminal)

(1) Explain the regeneration in a regeneration user terminal using drawing 20.

[0075]If DVD10 is set to the DVD drive 407, the user terminal processing 1500 will read the fee collection control data 500 memorized by DVD10 (1501), and will memorize it as the fee collection control data 500 in the memory storage 411 of the user terminal 40 (1502). And the regenerative data selection picture 5000 which requires the input of the table of the data number of each data stored in DVD10, a data name, and a reproduction limiting method (unrestricted **, such as the remaining number of times of refreshable and refreshable time) and the number of the data to reproduce is displayed on the display 403 (1503). If the number 5033 of the data to reproduce is inputted by the user (1504), Based on the fee collection control data (at the at an accumulation reproduction frequency limit value, an accumulation-reproduction-time limit value, a refreshable time limit value, refreshable inaugural year days and months, the end date time of refreshable, the time of a refreshable end date) 500 memorized by the memory storage 411, it is inspected whether the data specified by this number is refreshable (1505). In being refreshable, it reproduces by decoding this data using a releasing scramble key (1507). The fee collection control data 500 in the memory storage 411 is rewritten simultaneously (1508). And if extraction from the DVD drive 407 of DVD10 is directed, the fee collection control data 500 in the memory storage 411 will be written in the fee collection control data 500 in DVD10 (1512), and the fee collection control data of DVD10 will be updated.

[0076]When it is not DVD-RAM that DVD10 can rewrite but DVD-ROM which cannot perform rewriting, the fee collection control data 500 is memorized by the user card 60. Therefore, read-out of the fee collection control data 500 from DVD10 of the above-mentioned processings 1501-1512 and writing are transposed to the thing to the user card 60.

[0077]In the fee collection control data 500, when the center control 548 is specified as data, connection with the center apparatus 30 becomes indispensable when reproducing the data in the user terminal 40. It is specified when a vender and the donor of data want to change the purchase style of data, and the selling price if needed. That is, the user terminal processing 1500 transmits user ID and terminal ID to a center apparatus (1509), The fee collection control data 500 in the time of

corresponding to those user ID and terminal ID is acquired from the fee collection control data 740 stored in the user management file 700 in the center apparatus 30, and it memorizes to the memory storage 411 (1510). And reproduction is judged based on the fee collection control data 500 (1505).

[0078]When performing reproduction restrictions of data by accumulation reproduction frequency, an accumulation reproduction frequency limit value is inspected, when it is not 0, it becomes refreshable, and a decrement is carried out by reproduction start.

[0079]When performing reproduction restrictions of data by accumulation reproduction time, an accumulation-reproduction-time limit value is inspected, when it is not 0 minute, it becomes refreshable, and a decrement is carried out for every per minute after a reproduction start.

[0080]When performing reproduction restrictions of data in refreshable time, the reproduction point from the head of data becomes refreshable until it results in a refreshable time limit value. In this case, rewriting of a refreshable time limit value is not performed.

[0081]When performing reproduction restrictions of data in a refreshable period, the time of refreshable inaugural year days and months and the end date time of refreshable are inspected, and it becomes refreshable when the time of reproduction is included between the time of refreshable inaugural year days and months, and the end date time of refreshable.

[0082]It becomes refreshable, when performing reproduction restrictions of data by after-sale lapsed time and the time of reproduction is before the time of a refreshable end date.

[0083](2) Explain the contract modification processing in a contract modification processing user terminal using drawing 21.

[0084]In the user terminal 40, if the additional purchase of unpurchased data and change (change of a reproduction limiting method) of a purchase style are directed by the user among the data in DVD10, the user terminal 40 will perform contract modification processing 1600. The contract modification processing 1600 performs processing similar to the sales processing in the sales terminal 20.

[0085]If a contract modification key is inputted, the contract modification processing 1600 will display the message which requires the set to the card reader of a user card on the display 403 (1602), and will read the user ID, the password, and the term of validity which are stored in the user card (1603).

[0086]Next, the message which requires the input of a password of a buyer is displayed on the customer side display device 202 (1604), and the input of a password is received (1605). And coincidence with the password 612 read from the user card 60 is inspected (1006).

[0087]When the user card 60 is not shown from a customer, the message which

requires the input of user ID of a buyer is displayed on the customer side display device 202 (1630), and the input of user ID is received (1631). Next, the message which requires the input of a password of a buyer is displayed on the customer side display device 202 (1641), and the input of a password is received (1642). And in [transmit this user ID and the password which were entered into the center apparatus 30 (1032), and] the center apparatus 30, Coincidence of correspondence-related [of the user ID 711 and the password 712 which are registered into the user management file 700 of the center apparatus 30] is inspected, and the result is transmitted to the sales terminal 20 from the center apparatus 30 (1633).

[0088]And if the correspondence relation between user ID and a password is in agreement, the message which requires the set to the DVD drive 407 of DVD10 will be displayed on the display 403 (1620), and the disk serial number of DVD10 will be read (1621). To the center apparatus 30, and user terminal ID, inputted user ID, The data number of the data stored in the disk serial number of DVD10 or this DVD10 set to the DVD drive 407, User ID [which is memorized by the fee collection control data 500 / of a buyer] 520 and sales terminal ID530 is transmitted (1608), and the sales amount according to purchase style of each data is received from the data sales file 750 stored in DB311 of the center apparatus 30 (1609). And the contract modification screen 900 shown in drawing 10 which requires the input of the number of data, and the purchase style of each data purchased on the display 403, It displays as the name 920 of each data stored in DVD10, and the table 930 of the sales amount (difference with a purchased purchase style) of each purchase style (1610), and the input of the data number 910 and the purchase style 932 is received (1611). While the input of a data number and a purchase style is performed until an end is directed, and an input is performed, the amount of money 940 for a schedule is displayed (2510). Next, the data number of the purchased data and a purchase style are transmitted to the center apparatus 30 (1615). And in the center apparatus 30, according to each sold data and its purchase style, the fee collection control data 500 is generated (1616), and it enciphers (1617), and records on DVD10 set to the DVD drive 407 of the user terminal 40 (1618). When it cannot record on DVD10, the enciphered fee collection control data 500 is recorded on the user card 60 (1620). When unrecordable on the user card 60, or when the user does not possess the user card, the ***** data enciphered using the printer 406 is printed (1622).

[0089](Processing of a center apparatus) Each processing of the center apparatus 30 in connection with each processings 1000–1600 of the sales terminal 20 and the user terminal 40 mentioned above is explained.

[0090](1) Explain password verification processing of the password verification center apparatus 30 using drawing 22.

[0091]If the user ID and the password for password verification are received from the

user terminal 20 or the sales terminal 40 (3101), the password verification processing 3100, Coincidence of correspondence-related [of the user ID 711 and the password 712 which are stored in the user management file 700] is inspected (3102), and the message which shows coincidence or an inharmonious result is replied to the user terminal 20 or the sales terminal 40 (3103).

[0092](2) Explain the sales processing of the sales processing center apparatus 30 using drawing 23.

[0093]The user ID into which sales terminal ID and a buyer inputted the sales processing 3200 with the sales terminal, If the data number of the data stored in the disk serial number of DVD10 or this DVD10 set to the DVD drive 407 of the sales terminal 40 is received from the sales terminal 40 (3201), The user class (A, B, C, D) 714 of the user who reads the user management file 700 first and has the user ID which received is acquired (3202). Next, the data sales table 750 is inspected and the selling price corresponding to the received disk serial number or each data data number of DVD10 is acquired (3203). The selling price is acquired according to the purchase style applicable to an user class, and transmits to the sales terminal 40 (3204). And if the purchased data number and its purchase style are received from the sales terminal 40 (3205), according to the purchase style of each sold data, the fee collection control data 500 will be generated (3206), and it will encipher (3207), and will reply to the sales terminal 40 (3208). The generated this fee collection control data is registered as the fee collection control data 740 of the user management file 700 (3209).

(3) Explain contract modification processing of the contract modification processing center device 30 using drawing 24.

[0094]The user ID into which user terminal ID and a user inputted the sales processing 3300 with the user terminal 40, The data number of the data stored in the disk serial number of DVD10 or this DVD10 set to the DVD drive 407 of the user terminal 40, If purchase style [of each data before change], user ID [which is memorized by the fee collection control data 500 / of a buyer] 520, and sales terminal ID530 is received from the user terminal 40 (3301), The user class (A, B, C, D) 714 of the user who reads the user management file 700 first and has the user ID which received is acquired (3302). Next, the selling price of each data of one or more data numbers of the data which inspects the data sales table 750 and is contained in DVD of the disk serial number of DVD10 which received, or the received data number is acquired (3303). The selling price is acquired according to the purchase style applicable to an user class, calculates the difference of the selling price with the purchase style before change (3304), and transmits to a user terminal (3305).

[0095](4) Explain the selling price change processing of the selling price change processing center apparatus 30 using drawing 25.

[0096]The selling price change processing 3400 Sales terminal ID from the sales

terminal 40, user ID, If the disk serial number of password and DVD10 is received (3401), A salesperson's user ID 711 and coincidence of correspondence-related [of the password 712] are inspected using the user management file 700 stored in DB311 (3402), and the result is transmitted to the sales terminal 20 (3403). If a password is in agreement, the data sales file 750 will be read and the sales amount according to purchase style of each data before change will be transmitted to the sales terminal 40 (3404). Next, the sales amount according to purchase style of each data after change is received from the sales terminal 40 (3405). And the data sales file 750 is updated to the sales amount according to purchase style of each received data (3406).

[0097](5) Explain the user-class change processing of the user-class change processing center apparatus 30 using drawing 26.

[0098]The user-class change processing 3500 From the sales terminal 40 to sales terminal ID. If user ID, a password, and the user class of the user who changes are received (3501), A salesperson's user ID and coincidence of correspondence-related [of a password] are inspected using the user management file 700 stored in DB311 (3502), and the result is transmitted to the sales terminal 40 (3503). If a password is in agreement, the user class 714 of the user before change will be transmitted to the sales terminal 40 (3504). Next, each user's user ID and user class after change are received from the sales terminal 40 (3505), and the user class 714 of the user management file 700 is updated (3406).

[0099](6) Explain the fee collection control data change processing of the fee collection control data change center apparatus 30 using drawing 27.

[0100]In the fee collection control data 500, when the center control 748 is specified, connection with the center apparatus 30 becomes indispensable when reproducing the data in the user terminal 20. It is specified when a vender and the donor of data want to change if needed, the conditions required for reproduction, i.e., the fee collection control data, of the data.

[0101]The fee collection control data change processing 3600 as an update request of the fee collection control data 500 from the sales terminal 40, user ID, a disk serial number, and a new playback limiting method (accumulation reproduction frequency accumulation reproduction time.) If refreshable time and a refreshable period are received (3601), a salesperson's user ID and coincidence of correspondence-related [of a password] will be inspected using the user management file 700 stored in DB311 (3602), and the result will be transmitted to the sales terminal 40 (3603). If a password is in agreement, based on the playback limiting method concerned, the new fee collection control data 500 is raw-**(ed), the user management file 700 registered into DB311 will be read, and the fee collection control data 740 corresponding to user ID 711 and disk serial 720 received number will be rewritten.

[0102](Example which changes a reproduction limiting method by an user class) In an above-mentioned example, although the selling price of the data to a user was

changed by the user class, the example which changes the unit (reproduction frequency, regeneration time, refreshable period) of the reproduction limiting method for a sales unit price by an user class is also considered. In this case, if an user class is changed, the unit of the purchased reproduction limiting method can be changed later.

[0103](Example in data broadcasting) In the above-mentioned example, the buyer carried DVD which is a physical memory medium, and one gestalt of the off-line data distribution which is set to its own user terminal and reproduced was shown. However, distribution etc. distribute data to the hotel image server of the picture image data using data broadcasting and a satellite from a center apparatus on-line at a user terminal, end accumulation is carried out into a user terminal, and it can apply equally also to the system reproduced and used later.

[0104]

[Effect of the Invention]In the off-line data utilization system with which the acquisition time of data differs from the utilization time of data in this invention, it is possible to set up various reproduction limiting methods (the number of times of refreshable, refreshable time, a refreshable period, unrestricted **) as a standard of the fee collection to data. After sale of data, the additional purchase of data is performed and a user or a vender can make a change of a reproduction limiting method. Thus, in this invention, the purchase style of the fine data in consideration of the classification of data or the customer's classification is realizable.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]System configuration

[Drawing 2]The outline of a sales terminal

[Drawing 3]The outline of a user terminal

[Drawing 4]The outline of a center apparatus

[Drawing 5]Structure of accounting information data

[Drawing 6]The data structure of a user card

[Drawing 7]Structure of a user management file

[Drawing 8]Structure of a data sales file

[Drawing 9]An example of a purchase data selection picture

[Drawing 10]An example of a contract modification screen

[Drawing 11]An example of the selling price change screen 1

[Drawing 12]An example of the selling price change screen 2

[Drawing 13]An example of the user-class change screen 1

[Drawing 14]An example of the user-class change screen 2
[Drawing 15]An example of a regenerative data selection picture
[Drawing 16]Explanation of the sales processing in a sales terminal
[Drawing 17]Explanation of the selling price change processing in a sales terminal
[Drawing 18]Explanation of the user-class change processing in a sales terminal
[Drawing 19]Explanation of the accounting information data changing processing in a sales terminal
[Drawing 20]Explanation of the regeneration in a user terminal
[Drawing 21]Explanation of the contract modification processing in a user terminal
[Drawing 22]Explanation of the password verification processing in a center apparatus
[Drawing 23]Explanation of the sales processing in a center apparatus
[Drawing 24]Explanation of the contract modification processing in a center apparatus
[Drawing 25]Explanation of the selling price change processing in a center apparatus
[Drawing 26]Explanation of the user-class change processing in a center apparatus
[Drawing 27]Explanation of the accounting information data changing processing in a center apparatus

[Description of Notations]

10 DVD,
20 Sales terminal,
30 Center apparatus
40 User terminal
50 Communication line,
60 User card,
500 Fee collection control data,
700 User management file,
800 Purchase data selection picture,
900 Contract modification screen,
4001 Selling price change screen 1,
4002 Selling price change screen 2,
4101 User-class change screen 1,
4102 User-class change screen 2,
5000 Regenerative data selection picture,
1000 Sales processing in a sales terminal,
1100 Selling price change processing in a sales terminal,
1200 User-class change processing in a sales terminal,
1300 Accounting information data changing processing in a sales terminal,
1500 Regeneration in a user terminal,
1600 Contract modification processing in a user terminal,
3100 Password verification processing in a center apparatus,
3200 Sales processing in a center apparatus,

- 3300 Contract modification processing in a center apparatus,
- 3400 Selling price change processing in a center apparatus,
- 3500 User-class change processing in a center apparatus,
- 3600 Accounting information data changing processing in a center apparatus